

IN THE CLAIMS:

The following is a complete listing of claims in this application.

Claims 1-18 (canceled).

19. (new) Method for kneading dough containing soft wheat flour, comprising kneading the dough in the presence of wetting water for at least two minutes in a kneading machine using at least one mechanical agitator, in the presence of ozone,

said kneading taking place under a gaseous phase in the kneading machine of pressure between 1.1 and 1.6 absolute bars,

wherein the ozone is added to the kneading machine in a quantity such that a ratio of grams of ozone added per hour to quantity of dough produced in kilograms per hour is between 0.004 and 0.06, and

wherein at least part of the ozone added is supplied in dissolved form in the wetting water added to the flour.

20. (new) Method according to claim 19, wherein the wetting water containing dissolved ozone is prepared from a vector gas containing ozone.

21. (new) Method according to claim 20, wherein the vector gas is air, oxygen or a mixture thereof.

22. (new) Method according to claim 19, wherein the wetting water is ozonated or hyper-ozonated, and is prepared using a bubbling-type dissolution reactor equipped with a porous device, operating with or without a pressurized gaseous headspace, using pressure dissolution devices of single or multi-stage hydro-ejector type, or using pressure boosters or compressors of dry or liquid ring-type.

23. (new) Method according to claim 19, wherein the wetting water has a pressure between 0.5 and 2.2 absolute

bars.

24. (new) Method according to claim 23, wherein the pressure of the wetting water is between 1.7 and 1.9 absolute bars.

25. (new) Method according to claim 1, additionally comprising supplying ozone to a gaseous headspace in the kneading machine.

26. (new) Method according to claim 25, wherein the ozone is added to the gaseous headspace in the kneading machine from a vector gas containing ozone.

27. (new) Method according to claim 26, wherein the vector gas is air, oxygen or a mixture thereof.

28. (new) Method according to claim 19, wherein the pressure in the gaseous phase is between 1.3 and 1.5 absolute bars.

29. (new) Method according to claim 19, wherein ozone is added selectively, sequentially, continuously or through use of successive sequences of ozone in the wetting water and ozone supplied to a gaseous headspace in the kneading machine.

30. (new) Method according to claim 19, wherein the kneading is conventional, intensive or hyper-intensive.

31. (new) Method according to claim 19, wherein the kneading is performed solely by at least one said mechanical agitator, excluding any mixing systems using injection of water under high pressure.

32. (new and withdrawn) Kneading machine enabling kneading in the presence of ozone, comprising a kneading bowl or kneader body, a mechanical agitator extending into the kneading bowl or kneader body, a driving device for the mechanical agitator, an inlet for ozonated or hyper-ozonated water, at least one dissolution reactor for preparing ozonated or hyper-ozonated water connected to the inlet, and an ozone generator connected to the at least one dissolution reactor.

33. (new and withdrawn) Kneading machine according to claim 32, wherein the at least one dissolution reactor is a bubbling-type reactor equipped with a porous device, operating with or without a pressurized gaseous headspace, using a pressure dissolution device of single or multi-stage hydro-ejector type, or pressure boosters or compressors of dry or liquid ring-type.

34. (new and withdrawn) Kneading machine according to claim 32, additionally comprising a gaseous ozone inlet connected to an ozone generator.

35. (new and withdrawn) Kneading machine according to claim 32, additionally comprising a sealing lid for the kneading bowl, said lid containing a compressible seal allowing the agitator to extend into the kneading bowl under seal, the kneading machine being constructed and arranged for kneading at mixing speeds of between 40 and 200 rpm.

36. (new and withdrawn) Kneading machine according to claim 32, additionally comprising a water reservoir, a salt reservoir, a flour reservoir, a yeast reservoir, a device for conveying the dough forwards and a dough outlet, the kneading machine being constructed and arranged for continuous kneading at mixing speeds of between 100 and 600 rpm.